# NEWS.

DR. WILLIAM TRELEASE is now in Europe. He will return about August first.

HARVARD UNIVERSITY at its recent commencement conferred upon Professor W. G. Farlow the degree LL.D., an honor most worthily bestowed.

THE LAST ISSUES of Lloyd's *Photogravures of American Fungi* (nos. 9 and 10) illustrate *Polyporus Berkeleyi*, and maintain the high character of the previous issues.

PROFESSOR D. T. MACDOUGAL has an untechnical article on the colors of plants, especially the non-green colors, in the May number of the *Popular Science Monthly*.

PROFESSOR THOS. A. WILLIAMS, professor of botany in the Agricultural College of South Dakota, has been appointed an assistant in the Division of Agrostology in the Department of Agriculture.

DR. J. W. HARSHBERGER, in pursuing his ethno-botanical studies, has reached the conclusion that the pumpkin is indigenous in America, a view which he elaborates to some extent in *Science* (June 19th).

MR. A. A. HELLER has been appointed instructor in botany and curator of the herbarium in the University of Minnesota *vice* E. P. Sheldon, who resigns to find a more congenial field in the real-estate business.

MR. JAMES BRITTEN has published an account (*Jour. Bot.*, June) of Arruda's Brazilian plants, the occasion of it being the doubtful or inaccurate citation of them in what he is pleased to call "Jackson's *Index*."

A NEW CASE of apparent symbiosis, between *Tetraplodon* and *Peziza*, n which the rhizoids of the moss were associated with the fungus hyphæ, has been found by Professor F. E. Weiss. (*Rep. Brit. Ass.* 1895: 855).

IN THE *Bull. Torr. Bot. Club* (May), W. W. Rowlee and K. M. Wiegand describe some very interesting hybrids of *Salix candida*, found near Ithaca, N. Y.; and S. M. Tracy and F. S. Earle describe numerous new fungi from Mississispi.

A LIST OF forty-seven freshwater algæ new to Great Britain is given by W. and G. S. West in *Jour. Roy. Mic. Soc.*, April, 1896. Fourteen new species are described with two new genera. Two plates of very crowded illustrations accompany the list.—S.

DR. V. F. BROTHERUS, of Helsingfors, left about the middle of April upon a botanical journey into central Asia. He will explore the high mountain flora of Issikul, giving particular attention to the mosses. He expects to return about the first of September.

PROFESSOR C. S. SARGENT, of Boston, and M. H. de Vilmorin, of Paris, are the best known of the four recipients of the Veitch medals, awarded by the Royal Horticultural Society to gardeners promoting the advance of horticulture. (*Gard. Chron.*, May 16).—S.

PROFESSOR GANONG, of Smith College, has distributed, as a separate from the elective pamphlet, an outline of the courses in botany offered for 1896–7. It would be useful to botanists if the practice were general, so that each might know what is offered to students in the way of advanced work.

A WELL-EXECUTED colored plate of *Erythronium mesochoreum* Knerr is published in the commencement number of *The Midland*, the college magazine of Midland College, Atchison, Kansas. A short general account of the plant by Professor E. B. Knerr is also illustrated by text figures of sterile and fertile plants of *E. albidum* and *E. mesochoreum*.

A CONTINUATION of Briquet's *Labiatæ* forms part 134 of *Die Natürlichen Pflanzenfamilien*. We note in it the splitting up of *Cedronella*, retaining the old name for the single species of the Canary islands, and recognizing two American genera, *Meehania* Britton, and *Brittonastrum* Briquet. Part 135 contains the conclusion of Engler's *Burseraceæ*, and *Meliaceæ* by H. Harms.

MR. F. S. EARLE, formerly connected with the Gulf Station of the Mississippi Agricultural Experiment Station and with the Agricultural Department of the United States, was appointed adjunct professor of horticulture at the Alabama Polytechnic Institute in January last. Upon Professor Underwood's appointment to Columbia University he was recently promoted to the professorship of biology.

FOLLOWING the appearance of our violets in the *Synoptical Flora*, Professor E. L. Greene (*Pittonia*, May 16), and Mr. C. L. Pollard (*Proc. Biol. Soc.*, Wash., May 26) have added to the literature of the genus. The work of the former was mentioned in this journal for June. Mr. Pollard deals with the purple-flowered acaulescent forms of the Atlantic coast, presenting ten forms, of widely different limitation and nomenclature from the presentation of the same forms in the *Synoptical Flora*.

RECENT NUMBERS of the *Gardeners' Chronicle* (Apr. 4, 18, and May 2) give considerable space to a discussion of the larch disease, or blister, caused by the fungus, *Peziza Willkommi*, with several illustrations. The disease originates probably in early spring when the hydrostatic pressure is consider-

able. Though essentially a bark disease, it frequently causes malformations of the trunk and even the death of the tree. Cold and damp are thought to be the prime causes. — S.

IN A PAPER read before the London Pathological Society, Mr. S. G. Shattuck gives the results of some investigations in regard to the healing of incisions in vegetable tissues. When both surfaces were freely exposed to the air, on each surface a layer of cork was formed, which gave place to the underlying parenchyma when the two corky layers met. The other common method of healing was by cell-division on either face of the injury and was usual when the surfaces were not sufficiently separated to admit the air. (*Gard. Chron.*, May 23). — S.

AT THE CALL of a committee of representative persons interested in Maine botany, a convention was held at Portland, July 12–15, 1895. The different sessions were attended by about one hundred persons, many of whom expressed a desire to become members of a permanent organization, and as an outgrowth from this convention the Josselyn Botanical Society of Maine was formed. The second annual meeting was held in the State Normal School, Farmington, July 7–10, 1896. The general plan for the meetings is to devote the first two days to papers and discussions, and the last two to field expeditions into the surrounding country.

THE FIRST BULLETIN of the New York Botanical Garden, recently issued, contains a full statement of the status of this important enterprise. Of special interest to botanists is the agreement with Columbia University, whereby the large herbarium and library of the college is to be deposited with the Garden. This will make the latter at once a great botanical center, situated in surroundings which will give ample room for expansion, and for the proper development of every phase of botany. In the interest of botanical science in America it is to be hoped that Dr. Britton will find generous support for the development of his far-reaching plans. Such opportunities should develop more than a great taxonomic center, but to accomplish it New York must continue to be very generous.

OTTO KAISER has reinvestigated the nuclear division in various cells of Characeæ. He finds that mitosis alone occurs in all apical, segment, nodal and peripheral cells, in the nodal cells of the cortical lobes, the cells of the antheridia and of young oogonia. In the segment cells, especially in those of the so-called leaves, the aster, metakinesis and diaster stages are somewhat different from the ordinary form, being of the barrel type. Centrosomes were present with the resting nuclei as well as with all stages of their division. Fragmentation occurs only in the cortical cells of older oogonia, and in the internodal cells of the stem, of the "leaves," and of the older cortical lobes. Only in these is more than one nucleus found. Kaiser's best results

were obtained with material fixed in corrosive sublimate solution, or Hermann's or Flemming's fluids. Staining with Heidenhain's hæmatoxylin produced sharply outlined mitotic figures.

THE CORNER STONES of the Hull Biological Laboratory of The University of Chicago were laid July 3d, with appropriate ceremonies. An address was delivered by Dr. George L. Goodale, of Harvard University, upon "Some of

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the relations of the new natural history to modern thought and modern life," in which the speaker made a strong statement concerning the claims of biology to a place in educational schemes and also upon the community. Head Professor John M. Coulter officiated at the laying of the corner stone of the Botanical Hall and made a brief statement concerning the purposes of the building. In the evening the visiting biologists were entertained by The University at the Quadrangle Club House, where informal responses were called for by President Harper. Among the visiting botanists present were: Dr. Geo. L. Goodale, Harvard University; Dr. T. J. Burrill, University of Illinois; Dr. T. H. MacBride, University of Iowa; Dr. Charles R. Barnes, University of Wisconsin; Dr. G. F. Pierce, University of Indiana; Dr. C. F. Millspaugh, Field Columbian

Museum. The accompanying cut will give some idea of the external appearance of the building, which will be ready for use in the spring of 1897.

THE RECENT TORNADO at St. Louis was so destructive that much anxiety was felt by botanists as to the fate of the Missouri Botanical Garden. In the absence of Dr. Trelease, Mr. C. H. Thompson, Acting Director, has furnished the following statement for the readers of the GAZETTE:

"The Garden was in the direct path of the storm, at the very beginning of the territory destroyed, and received less injuries than the region east of us. However, the damage done in the Garden is very considerable, the most of it being in the arboretum, where something like 160 trees were either uprooted or broken off near the ground, so that they had to be taken out. These, of course, were total losses. Something over 250 were very badly damaged. In many cases the tops of the trees were almost entirely carried away. Many of these, by judicious pruning, will in a few years grow to be beautiful trees again, while many are so badly broken that it is probable that they will die. The shrubbery was badly whipped and broken, but fared better than the trees. The bed plants were almost totally destroyed in the exposed parts of the grounds. However, these are now replaced. The wreckage from the trees is rapidly being gathered up, and the Garden promises by another month to be as beautiful as ever, with only the vacant places here and there to remind us of the ravages of the storm.

Buildings suffered somewhat. The Linnean house, which shelters the palms in the winter season, had the glass portion of the roof entirely demolished. The office building had the tin roof torn from the south wing, and other buildings escaped with slight damages. At the office building, where the library and herbarium are kept, no damage whatever was done to the contents of the building. No permanent damage was done to the Garden, and most of it can be repaired in a short time."

PROFESSOR E. L. GREENE, in the continuation of his "studies in Compositæ" (*Pittonia* 3: 43), presents further conclusions in regard to the "asteraceous" forms. Generic lines in this vicinity either were or are in a chaotic state, and possibly ever will be. Apparently species may belong to any one of several genera dependent upon the standpoint of the observer. In the present paper the genera *Oonopsis* (a new genus), *Xylorrhiza*, *Heleastrum*, *Dœllingeria*, *Eucephalus*, and *Machæranthera* are presented synoptically, *Aster* and *Applopapus* being the most frequent synonyms.

DR. JOHN K. SMALL, in *Bull. Torr. Bot. Club* (May), has taken Raimann's work on *Œnothera*, as presented in Engler and Prantl's *Natürlichen. Pflanzenfamilien*, and applied it to a study of North American materials. The composite character of this Linnæan genus was notably pointed out by Spach

in 1835, but his numerous genera, for some reason, were not largely accepted. Raimann adopted Spach's idea, but seems to have presented his conclusions in a more satisfactory way. Dr. Small presents fifteen genera as represented in North America under the single generic name *Œnothera*, the old name retaining but five species, such as *Œ. humifusa*, *Œ. laciniata*, *Œ. rhombipetala*, etc. Those having somewhat acquainted themselves with the genus will be lost for a time in the maze of revived generic names. A new genus, *Gaurella*, is described, founded upon *Œ. canescens* Torr. & Frem., a number of new species are described, and abundant opportunity is given for new combinations. It is to be hoped that such extensive fragmentation may not be found necessary in many of our large genera, or there will be a call for an international congress to define a genus.

WE HAVE RECEIVED a bulletin from the Alabama Experiment Station which should occasion some remark. It is Bulletin 70, and is entitled "The Flora of Alabama, Part V," by P. H. Mell, botanist to the station. The four preceding parts have never come to our notice, but the present one deals with the *Leguminosæ* and *Rosaceæ*. We suspect, however, that this is the first part to appear, as certain prefatory matters would indicate. The author seems to be aware that botanists have been doing something in the last "ten or twelve" years, for he says so; but just what, he is evidently uncertain about, as the list testifies. We would suggest that if an "up-to-date" flavor be desired for the catalogue, the conspectus of orders had better be changed in several particulars, at least by removing the gymnosperms from their unnatural position between dicotyledons and monocotyledons; some dubious species had better be investigated, and all of them should be substantiated by herbarium specimens; and more than all, Dr. Chas. Mohr's relation to this work should be clearly stated. Botanists outside of Alabama have known for years that Dr. Mohr has been working upon a flora of his state, and we have expected a model state flora, because Dr. Mohr's zeal and patient accuracy are well known. In the list before us certainly one-half of the *Leguminosæ* and one-third of the *Rosaceæ* are credited to Dr. Mohr alone; and we cannot believe that this extensive information was obtained from our good friend with the expressed intention of anticipating his own flora. In other words, Dr. Mohr must have granted a favor that has been abused.